DETAILED ACTION

Remarks

The Examiner thanks Applicant for bringing the typo in the provisional double patenting rejection of the office action mailed 5/13/2009 to the Examiner's attention. The instant office action corrects the provisional double patenting rejection and restarts the time period for response.

Election/Restrictions

1. Applicant's election without traverse of group I, claim 1 in the reply filed on 3/20/2009 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kessler (US 5515683) in view of Bijvoets (U.S. 5,006,178).

Regarding claim 1, Kessler teaches a thermoelectric device comprising a Peltier effect heat transfer circuit system including:

- A plurality of thermoelectric transducers connected in series (1, 2) (figure 2),
- A direct current power supply serially connected to at least one of the thermoelectric devices (col. 4, lines 55-65), and
- Each of the heat absorption modules in the Peltier effect heat transfer circuit system being disposed away from each of the heat generating modules so as to keep a temperature of the heat absorbing module at less than that of the heat generating module (col. 6, lines 52-57).

Kessler is silent to the particular structure of the thermoelectric transducers.

Bijvoets teaches thermoelectric converter elements (leftmost side of figure, the top and bottom combinations of p and n), each of which is formed to join a first electric conductor and a second electric conductor having different Seebeck coefficients from each other (the first conductors are the p blocks, the second conductors are the n blocks); a joining member joining the first and second conductive members (5), a coupling member connecting each of the joining member opposite parts of the first and second conductive members (9) electrically and serially to a respective one of a joining member opposite parts of the first and second member in each of at least the remaining one of the thermoelectric transducers (figure 1) (col. 3, lines 1-5).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the particulars of the Bijvoets thermoelectric transducers in Kessler because the device of Bijvoets reduces efficiency losses due to joule heat in the elements (col. 1, lines 25-50).

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-34 of copending Application No. 10727988. Although the conflicting claims are not identical, they are not patentably distinct from each other because the plurality of elements within the copending application also meets the requirements of the present invention for 2n pieces (see copending claims 2, 3 and 4).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MIRIAM BERDICHEVSKY** whose telephone number is (571)270-5256. The examiner can normally be reached on M-Th, 10am-8pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on (571) 272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. B./
Examiner, Art Unit 1795

/Alexa D. Neckel/
Supervisory Patent Examiner, Art Unit 1795